

ABSTRACT OF THE DISCLOSURE

5 A method with which all semiconductor lasers can  
be used as products is provided by regulating reflectance  
variations of all the semiconductor laser end faces  
10 arranged in an electron beam deposition apparatus after  
completion of deposition to a predetermined range when  
semiconductor laser end faces are coated. An end face (3)  
that is placed at a position at which the film thickness is  
made relatively thicker than those of other coat batches  
15 due to the large flux of a deposition beam is inclined by  
an angle  $\beta$  to adjust the incident angle of the deposition  
beam. The relationship, actual film thickness (9b) = film  
thickness (9b) in direction of deposition beams central axis  
(8a)  $\times \cos\beta$ , is utilized to reduce the film thickness of the  
end face (3) to the predetermined range.

09904673-12904  
TOP SECRET E 740660